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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/609,502 | 07/03/2000 | Tomoyasu Katsuyama | 9281/3698 | 1658 |

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EXAMINER

LESPERANCE, JEAN E

| ART UNIT | PAPER NUMBER |
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2674

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DATE MAILED: 04/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/609,502

Applicant(s)

KATSUYAMA ET AL.

Examiner

Jean E Lesperance

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103 (a) as being unpatentable over U.S. Patent # 6,249,362 ("Sato et al.") in view of U.S. Patent # 5,504,538 ("Tsujihara et al.").

As for claims 1 and 10, Sato et al. teach a processed analog signal that is converted into a digital image signal by an analog digital A/D converter 1031; a reference numeral 130 denotes a black level correction circuit for adjusting the black level of the analog image signal outputted from the CCD 110; 131, an analog digital (A/D) converter for converting the analog image signal whose black level is corrected into the digital image signal. Accordingly, Sato et al. teach all the claimed limitations as recited in claim 1 with the exception of providing a blank data generator, an image data combiner and display the output of the image combiner.

However, Tsujihara et al. teach a blanking period (column 13, line 39) corresponding to a blank data generator; a brightness reference signal is added to the video signal blanking period and applied to the first electrode (column 7, lines 7-9) corresponding to an image data combiner; the BRT reference signal from the BRT reference signal generator 7 that is added to the video signal by the adder 5, and the

reference signal-added video signal is output (column 11, lines 18-21) corresponding to display an output of the image data combiner on said screen.

It would have been obvious to utilize the blanking period, the added signal , and the output image as taught by Tsujihara et al. in the image read system disclosed by Sato et al. because this would provide an adding means for adding a brightness reference signal symmetrically with reference to the black level in the vertical blanking period of the input video signal.

As for claims 2, 7, and 11, Tsujihara et al. teach a variable gain amplifier 17 for feedback control of the contrast (column 8, lines 8-9) corresponding to a variable resistor.

As for claims 3, 8, and 12, Sato et al. teach a signal indicating that the backlight state is detected from the IX information (column 22, lines 61-62) corresponding to an illumination sensor to detect the illumination around a video camera that outputs said analog image signal.

As for claims 4, 9, and 13, Tsujihara et al. teach a BRT reference signal that is added to the pedestal voltage level (black level) of the video signal and the range of upper or lower limits of the added BRT reference signal can be varied according to the type of display device (column 12, lines 44-50).

As for claim 5, Sato et al. teach an electric image signal which is processed with the shading correction enters a gamma correction circuit 43 where contrast of the image is adjusted and the image signal which is presented as ten-bit image data is converted into eight-bit image data. The two images are different.

As for claim 6, Tsujihara et al. teach a bias adjustment adjusting near-black low light levels, 0% and 25% black level test signals are emitted, and the white balance of near-black low light levels is adjusting using the bias control signal input from the input terminal (column 10, lines 23-26); blanking period (column 13, line 39) corresponding to a blank data generator; a brightness reference signal is added to the video signal blanking period and applied to the first electrode (column 7, lines 7-9) corresponding to an image data combiner; the BRT reference signal from the BRT reference signal generator 7 that is added to the video signal by the adder 5, and the reference signal-added video signal is output (column 11, lines 18-21) corresponding to display an output of the image data combiner on said screen; BRT reference signal is added to the pedestal voltage level (black level) of the video signal, but can be added in other level for obtaining the added BRT reference signal to do the BRT control (column 12, lines 44-47) corresponding to black level of the blanking area is different from the black level of the digital image.

As for claims 14-16, Tsujihara et al. teach the current of the brightness reference signal is detected from the first applied signal to control the DC potential of the blanking signal applied to the second electrode. The high amplitude, wide band video signal and the brightness control signal can thus be separately driven at the first and second electrodes, respectively, and the amplitude and band width of the signal applied to the first electrode can be easily increased (column 10, lines 38-45) corresponding to a blanking marker signal corresponding to a single pixel between the blank area and the image display area such that a white line is vertically displayed on the screen which

separates the blank area and the image data area. It does not recited exactly as the claimed invention but it is inherent in the art a blank area on a screen is a pixel and it is separated from the rest of the display by lines. It does not say white line but it is obvious that it could be white line.

Response to Amendment

Applicant's arguments filed 1-21-2003 have been fully considered but they are not persuasive. The applicant argued that the prior art does not teach that "the black level in the blank area is independent of the black level of the digital image data area, that is the luminance in the digital image data area may be changed without altering the luminance of the blank area". Examiner disagrees because the prior art teaches BRT reference signal is added to the pedestal voltage level (black level) of the video signal, but can be added in other level for obtaining the added BRT reference signal to do the BRT control (column 12, lines 44-50) and as it can be read the video signal black level and other black level exists which are independent of the video signal black level. The brightness reference signal and contrast reference signal are added to the blanking period and horizontal fly-back period, respectively, of the video signal, the contrast reference signal is extracted based on the black level for contrast feedback control while applying the signal to the first electrode, and the current of the brightness reference signal is detected from the first applied signal to control the DC potential of the blanking signal applied to the second electrode (column 10, lines 33-41). The black level of the blank area is applied to the first electrode and the black level of the image data is

Art Unit: 2674

applied to the second electrode. The image data and blank area have black level that are independent of each other. Therefore the rejection is maintained as was rejected in the first office action.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (703) 308-6413. The examiner can normally be reached on from Monday to Friday between 8:00AM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

Art Unit: 2674

Supervisor, Richard Hjerpe, can be reached on (703) 305-4709 .

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office Whose telephone number is (703) 306-0377.

Jean Lesperance



Art Unit 2674

Date 8-22-2002



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600